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22b. TELEPHONE (Include Area Code)

(513) 255-2259

22c. OFFICE SYMBOL

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Abstract

MISCARRIAGE WITH A HISTORY OF ELECTIVE ABORTION:

A comparison study of the miscarriage experience--

Women With a History of Elective Abortion

vs.

Women Without a History of Elective Abortion

by Vivienne Kay Vidunas

**Chairperson of the Supervisory Committee:
Assistant Professor Kristen Swanson-Kauffman
Department of Parent and Child Nursing**

Miscarriage occurs in approximately 15-20% of all recognized pregnancies. This event is perceived as emotionally difficult by most women. In addition, some of these women have a history of elective abortion, which has also been associated with grief and feelings of loss. It has been speculated that the experience of one loss will affect other experiences of loss. The purpose of this research was to compare the meaning of miscarriage between two groups of women: those with a history of elective abortion versus those with no history of elective abortion. The difference in the negative meaning of miscarriage was compared between two groups of women: those with a history of abortion (n=84) and those without (n=376). In a secondary analysis of data, T-tests were used to determine any difference on mean MMS (Meaning of Miscarriage Scale) scores between the two groups. The MMS was designed by Swanson-Kauffman (University of Washington, Seattle, study in progress) to measure the negative meaning of miscarriage as experienced by women. There were no

significant differences in the two groups of women ($p=.107$). In addition the two groups of women appeared similar in the variables of age, length of time since loss, number of live children, history of stillbirth or neonatal death and educational level.



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A comparison study of the miscarriage experience--

Women With a History of Elective Abortion

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Women Without a History of Elective Abortion

by

VIVIENNE KAY VIDUNAS

A thesis submitted in partial fulfillment
of the requirements for the degree of

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1990

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Kristin Swanson Kauffman
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TABLE OF CONTENTS

	Page
Chapter 1: Introduction	1
Statement of problem	1
Purpose	2
Research question	2
Chapter 2: Literature Review and Conceptual Framework	3
Conceptual framework	3
Literature review	4
Miscarriage	4
Abortion	11
Comparison of Miscarriage and Abortion	15
Possible effects of abortion on miscarriage	16
Chapter 3: Methodology	20
Design	20
Sample	20
Instrument	22
Human Subjects Protection	23
Data Analysis	23
Chapter 4: Findings	24
Characteristics of Sample	24
Comparison of Scores	26
Chapter 5: Discussion	28

TABLE OF CONTENTS (CONTINUED)

	Page
Sample	28
Findings	29
Limitations of Study	31
Implications for future research	31
Implications for Nursing	33
References	35
Appendix A--Meaning of Miscarriage Scale	39

LIST OF TABLES

Number	Page
1. Variables range and mean for the total sample	24
2. Variable means and significance of difference between the two groups of women	25
3. Comparison of the two groups in number of cases, mean scores, and standard deviation	26

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DEDICATION

My thesis is dedicated to my family, especially my parents, who have instilled in me the value of education and always loved and believed in me. To my friends, especially James and Pam, for their support and encouragement. Finally to my husband, Paul, who has given new meaning to the words love and commitment...and new focus to my life beyond graduate school.

CHAPTER 1 INTRODUCTION

Statement of Problem

Miscarriage, the termination by natural causes of a previable pregnancy (Stack, 1984), occurs in approximately 15 to 20% of recognized pregnancies (Laferla, 1986). This event often evokes a sense of uncertainty and loss, and occasionally guilt (Reinharz, 1987; Swanson-Kauffman, 1983; Stack, 1984). Recent studies have begun to recognize the impact that this early pregnancy loss, medically known as spontaneous abortion, can have on a woman's life. Research has validated the need for health care providers to treat the psychological aspects along with the physical aspects of miscarriage.

Abortion is the elective termination of a previable pregnancy through medical intervention. In contrast to miscarriage, abortion involves a conscious choice by women to abort. This, too, evokes a myriad of emotional responses ranging from relief to guilt and a sense of loss. (Osofsky and Osofsky, 1972; Freeman, 1978; Peppers, 1987-88). A review of the research included in Peppers' study provides estimates of about 1.5 million abortions conducted annually in the United States (Peppers, 1987-88). The number of reported legal elective abortions increased every year in the United States from 1969 to 1982. In 1983, the abortion rate showed a slight decrease from 24 abortions per 1,000 women, ages 15 to 44, in 1982, to 23 per 1,000 in 1983. Furthermore, the number of abortions reported to the Center for Disease Control (CDC) in

Atlanta, Georgia, was probably lower than the number actually performed. (Ellerbrok, Atrash, Rhoderhiser, Hougue, and Smith, 1987).

Within the large population of women in their childbearing years who have a history of abortion, there are some who will spontaneously abort, ie. have a miscarriage. **The purpose of this research was to compare the experience of miscarriage in women with a history of abortion to the experience of women without a history of abortion.** Secondary analyses were completed on the questionnaire responses from participants in Swanson-Kauffman's study of The Miscarriage Experience at the University of Washington, Seattle (in progress).

The research question posed was: What is the meaning of miscarriage in women with a history of elective abortion compared to those without a history of elective abortion? The results of this research will assist health care providers in understanding the emotional impact of miscarriage for women with and without a history of elective abortion. This increased awareness will direct providers in assisting patients to cope with the event of miscarriage without ignoring past choices in their lives.

CHAPTER 2

Literature Review and Conceptual Framework

The literature relevant to the study of the experiences of miscarriage and elective abortion are reviewed here. First, the concept of loss will be discussed to establish a framework. To provide a broad overview, the events of miscarriage and abortion will be discussed individually, and then compared and combined. First, the event of miscarriage will be examined. Next, the responses to elective abortion will be reviewed. The experiences of miscarriage and abortion will then be compared. Finally, the possible effects of a history of elective abortion on the experience of miscarriage will be summarized.

Conceptual Framework

A review of Watson's (1979) analysis of loss will provide an understanding of the meaning of loss, the personal effects, and effects of future experiences. Loss is an abstract concept that can only be understood in terms that has meaning to the person experiencing it. A sense of loss may be experienced when any aspect of one's self (concrete, abstract, real or imaginary) is no longer available to a person. Watson considered loss in terms of psychological loss (ie. loss of self-concept, self-esteem or self-identity), sociocultural loss (ie. loss of social identity, social role, family constellation, or cultural heritage), and physical loss (ie. loss of body function or structure or loss in quality of valued physical attributes). One can extrapolate how early pregnancy loss will affect all three of these areas.

Watson reviews what may affect the concept of loss:

Psychological and sociocultural losses may take many different forms and meanings, depending on (1) the individual, (2) the extent of loss or change, (3) the extent to which the object lost was valued, (4) the manner in which the object lost was valued, (5) the number of previous losses, and (6) whether adequate coping and resolution occurred.

(Watson, 1979, p. 278-9)

Therefore, early pregnancy loss will have a different meaning for each individual. This meaning will be affected by previous experiences in her life. (Thus the importance of the research question previously proposed.) Watson explains the variables that affect loss: "Each loss carries with it other losses...Past meanings, associations, experiences, adjustments, and values establish a symbolic interaction that affects loss" (Watson, 1987, p. 281).

The framework for this thesis, then, is the concept of loss, a unique experience for every individual. Only the one experiencing loss can place meaning on it. Loss is both tangible and intangible, and is affected by previous losses in a person's past. Reviewed next are current literature on early pregnancy loss, both spontaneous and induced.

Literature Review

Miscarriage

It has only been recently that miscarriage has been viewed as a significant emotional event in women's lives. In the past, health care providers thought that the early fetal loss of miscarriage occurred too early to evoke an

emotional response. However, recent studies have revealed a number of responses to the experience of miscarriage. Feelings may include guilt, grief, sadness and anger (Reinharz, 1987; Wall-Haas, 1985; Stack, 1984; Swanson Kauffman, 1983; Siebel and Graves, 1980).

To begin the exploration of the experience of miscarriage, the work of Swanson-Kauffman (1983) will provide an in-depth overview. Further studies will then expand and support the reactions that women experience with the event of miscarriage.

Swanson-Kauffman (1983), utilizing a phenomenologic framework, analyzed comprehensive personal interviews with 20 women who had a recent miscarriage (within 15 weeks of the initial interview). She identified six "experience categories which underlie the Human Experience of Miscarriage" (p. 160). The six categories are: 1) Coming to Know; 2) Losing and Gaining; 3) Sharing the Loss; 4) Getting Through It; 5) Going Public; 6) Trying Again. An understanding of these categories will provide a sound baseline for grasping the broad picture of early pregnancy loss.

Coming to Know

During the process of coming to know, the inevitable loss of the pregnancy is realized. The experience has different beginning and ending points for every woman, but ultimately each woman perceives that she will not accomplish the hopes of a healthy pregnancy outcome. The course proceeds from previous ideas, to premonitions, to the first sign (ie. bleeding, diminishing breast tenderness, cramps), to waiting (the agonizing time when nothing can be

done to stop the inevitable or, alternatively, prove that a miscarriage will not occur), to confirmation and finally realizing you are no longer pregnant.

Losing and Gaining

Losing and Gaining captures the unique individuality of each woman's perception of the experience in both the loss and growth she experienced through the miscarriage. It was evident that even though a woman did not experience movement yet, often a recognized milestone for attachment (Klaus and Kennell, 1976), she viewed the miscarriage as a loss. Some of the perceived losses include loss of the child, or a part of herself, or the chance to be a mother.

Many, but not all, women were able to identify a gain from the experience. The recognized gains ranged from a stronger marriage to increased sensitivity, understanding, and self-awareness.

Going Public

Going public describes the woman's experience of letting others know of her loss and the price she pays for having (or not having) told others of her pregnancy. If the woman had "Gone Public" (p.189) with the news of the pregnancy, she must now tell others that she is no longer pregnant. The potential candidates for sharing her loss are greater if she has told others of her pregnancy, however, some women feel the need for time alone. Included in this category is the difficult experience of encountering infants or other pregnant women in public. Often the offhand comments received after going public may also be difficult to contend with.

Sharing the Loss

Sharing the loss describes the amount of support a woman received throughout her loss; from her husband, friends, family, health care providers, and the woman's God. Typically, a woman's husband was the most significant support, the one with whom she shared her experience.

Two main themes emerged in the Sharing the Loss Category. First, the availability of support networks: some women had a variety of supports, others did not. Second, the capacity of desire to use support systems. Not all women shared their loss, but if using one's support system for comfort was a practice of the past it was usually used during miscarriage also.

Getting Through It

Described in this category is the process of grieving. Swanson-Kauffman chose the terminology of getting through it rather than over it because several informants claimed they never get totally over it.

Data for this category came from second interviews where the informants were asked to describe where they were in the recovery process. The question of identifying a turning point in their grief was also proposed (a time when there seemed to be more good times than bad in a day). Swanson-Kauffman called this the acute phase of grief.

For 17 out of 20 informants 3.8 (range=one day to 16 weeks) was the average time when the acute phase was over. The second interview was held on an average of less than 12 weeks (range=7 days to 6 months) after the miscarriage. The 3 who could not identify a turning point may not have

resolved the acute stage of grief yet. Using the average of 3.8 weeks to resolve the acute grief, Swanson-Kauffman then compared the length of grief for miscarriage vs other types of loss. Miscarriage recovery was found to be shorter than the estimated grief period for losses of older people, ie. spouses, older children or neonatal infants. "Shorter, however, does not discount the attention this human loss experience deserves. There is no weight attached to human suffering, to assume 'lesser pain' is to fall into the all too typical assumption that early pregnancy loss is a non-event" (Swanson-Kauffman, 1983, p. 204-5).

Trying Again

Trying Again refers to the plans for future pregnancies and the related fears of future pregnancy loss. Four different plans for the future were explored: (a) presently pregnant, (b) trying to get pregnant, (c) avoiding pregnancy, and (d) having chosen a tubal ligation. Women who were pregnant at the second interview viewed this pregnancy with an increased vulnerability. They had tremendous concern about getting past the point of the previous miscarriage in this subsequent pregnancy.

These six experience categories identified by Swanson-Kauffman provide women's perspectives of the event of early pregnancy loss. The categories are not mutually exclusive, nor, perhaps, totally comprehensive, but provide an understanding of the magnitude with which miscarriage affects women's lives. It can therefore be understood that a miscarriage is not just a physical event to be handled by health care providers, but, also, an important emotional event in the

lives of women. Further studies reinforce both the negative psychological sequelae and grief reactions of women who have experienced a miscarriage.

Reinharz (1987) examined miscarriage through a study of printed material on women's experiences. Through this historical perspective, two common themes emerged concerning the experience of miscarriage: guilt and grief. The history of miscarriage supports many of the beliefs and myths surrounding the event, which result in women's guilt. The importance of carrying a pregnancy to term influence a woman's feelings of self worth. Failure to deliver a term infant results in grief over the loss of child, as well as, the loss of a dream. Genevieve and Margolies (1989) expanded on the theme of loss of a fantasy. They stated that the dreams of motherhood begin as early as childhood when little girls played house and practiced their roles as a mother. Therefore, the woman who miscarries is not only grieving the loss of a child, but the fantasy of her future as a mother.

Wall-Haas (1985) used a self-administered written questionnaire to study nine women's perception of miscarriage. The results revealed that most women experienced some level of sadness, preoccupation, thinking and dreaming about the baby, irritability, disbelief and anger. The anecdotal responses varied from relief (under circumstances decided it was best, although mildly affected by miscarriage) to a profound sense of loss and isolation. Overall, Wall-Haas summarized that miscarriage is a "cruel psychological event for it brings to an abrupt end this very special relationship" (p. 53).

The concept of grief following a miscarriage has been established by several studies (Reinharz, 1987; Wall-Haas, 1985; Swanson-Kauffman, 1983). Stack (1984) outlined why the grief following miscarriage may be inadequate for resolving the loss. Some of the reasons included: 1) a woman may be embarrassed to mention that she was, but is no longer, pregnant; 2) there is no funeral to assist with the grieving process, a woman rarely sees that which she has lost; 3) "Guilt is nearly a universal feeling experienced by women suffering from a miscarriage" (p.166) as they attempt to reason why; 4) there is a sense of helplessness as there is nothing she nor her health care providers can do to stop the process of miscarriage. These factors may set a woman up for an unresolved grief reaction.

Siebel and Graves (1980) studied the psychological implications of miscarriage by a self-administered questionnaire patients completed in the recovery room (a total of 93 patients). Although the timing of the administration of the test may be less than desirable (when women were in the recovery room after a D and C), a unique comparison group emerged from this study. Some of the pregnancies were unplanned (two-thirds of the patients were single, separated, divorced or widowed). Those whose pregnancies were planned were much more likely to say they were unhappy and much less likely to check any of the positive-affect adjectives. However, the percentage who checked three or more negative-affect adjectives was the same for both those who had planned and those who had not planned their pregnancy. Thus, "This suggests that even though a woman may not be unhappy about the termination

of pregnancy, the experience, nevertheless, may be emotionally upsetting for her." (p. 163).

In summary, it can be concluded that a miscarriage is an emotionally traumatic experience. It evokes a host of psychological responses, whether the pregnancy was planned or unplanned. This leads to the question: What is the response of termination by induced abortion? This question will be discussed in the next section.

Abortion

The event of abortion is complex in that it involves not only the termination of a pregnancy, but moral overtones presented by societal and religious views. A woman often has views on abortion before she is ever faced with the decision of terminating an unwanted pregnancy. Because abortion is not completely accepted by society, women may feel unable to discuss the event with others. McDonnell (1986) states that "for most women in our society, abortion is still a dark secret, a source of shame" (p. 58).

The prospect of elective abortion is just that--a choice. Although it may not be an easy choice, it may be the best decision for the circumstances. This is reflected in much of the research that describes women's reaction to abortion with a sense of relief (Burnell and Norfleet, 1987). The reactions have a broad range, but most women respond with few negative sequelae. (Osofsky and Osofsky, 1972; Lask, 1975). Those women with a strong religious background respond with more guilt. (Hildebrand, 1977; Osofsky and Osofsky, 1972).

Adler (1976) examined the sample attrition problems in abortion research. Reviewing 17 studies, she found the initial sample lost to follow-up to range from 17% to as high as 86%. Younger women and Catholic women were less likely to participate. Therefore, Adler concluded that women for whom the abortion was more stressful were less likely to be represented in research and many studies may have underestimated the negative sequelae of abortion.

A descriptive study by Freeman (1978) depicts the entanglement of issues involved in elective abortion. Initial request for participation was made at the pre-abortion interview. Those who agreed completed a self-administered questionnaire on demographics, sexual activity, contraceptive behavior, attitudes about contraception and abortion and relationship with male partners. Another self-administered instrument measured personality characteristics. A follow-up questionnaire was mailed approximately four months after the abortion. Of the 329 women who agreed to participate and completed the initial questionnaire, only 106 responded to the follow-up questionnaire.

The attitudes toward abortion showed that the women who obtained abortions did not view it as a type of birth control. Only 28% said they expected to have an abortion if unwanted pregnancy occurred. Over a third (37%) of the women had said they would never have an abortion, before their present circumstances. This highlights the conflicts one must resolve when the abortion decision is made.

Grief may be a common response to elective abortion. The largest proportion of the respondents (24%) reported the hardest part of the experience

was contending with feelings of loss of a child. Freeman also did follow-up on resolution of the abortion experience. She found that the important factor was not the absence of negative feelings, but the ability to cope with these emotions. The largest proportion of respondents (58%) said that it was a hard experience, but they learned a lot.

A factor which Freeman (1978) found affected the resolution of the abortion experience was the relationship with the woman's male partner. Those who had resolved their abortion by the 4 month follow-up perceived support from their partners surrounding the abortion decision. All those who perceived the experience as extremely upsetting four months later lacked support from their partners.

Robbins and DeLamater (1985) also studied the effect of support from significant others surrounding the experience of abortion. A self-administered questionnaire, which measured support and feelings of loneliness, was meant to be returned 4 weeks after the abortion. Of the 449 women who initially agreed to participate when asked during the pre-abortion counselling session, 228 women returned the questionnaires. It was concluded that the male partner's supportive attitude surrounding the abortion and his presence in the clinic at the time of the procedure appeared to reduce the woman's post-abortion loneliness. Parents or friends support did not have this same positive correlation with loneliness reduction. Therefore, support of the male partner appeared to decrease negative psychological sequelae following abortion.

Peppers (1987-88) studied the question of grief surrounding elective abortion. Eighty women who had elective abortions filled out a three part questionnaire. This questionnaire was designed to obtain demographic data, data related to the abortion decision, and responses to a grief scale (developed by Peppers in a prior study). Given the usual rapid resolution of symptoms of grief, Peppers hypothesized that decision to terminate may initiate the grief reaction. The wide variation of scores on the grief scale indicated the range of responses to elective abortion: from little difficulty with the abortion to tremendous emotional trauma.

Some believe that abortion may cause abnormal grief patterns (Joy, 1985; Buckles, 1982, Cavenar, Maltbie and Sullivan, 1978). Buckles (1982) explains that she has seen through her work as a counselor that, "some women experience delayed postabortion depression at significant turning points in their lives when major life decisions come up for reexamination and reworking." (p. 181). Joy (1985) described her work in treating women with post-abortion reactions, "I have found that women with [post-abortion] depressions respond very favorably to counseling using a grief format-the processing of the loss of the fetus as an unresolved grief issue." (p. 376). Cavenar, Maltbie and Sullivan (1978) portrayed possible pathological grieving following an abortion by using two case studies. In both cases the psychopathologic symptoms arose at the time of the expected delivery date of the electively aborted fetuses. "We believe that many psychogenic reactions to abortion are anniversary phenomena, motivated by incomplete or abnormal grieving over the loss of the fetus" (p.437).

In summary, the immediate response to abortion may include feelings of sadness, loss, grief and loneliness. In most cases severe psychological sequelae do not result from an abortion, however, a few counselors have described situations in which prolonged unresolved grief resulted from the abortion. Partners, again, as in miscarriage, were seen to be the greatest source of support.

Comparison of Miscarriage and Abortion

The preceding overviews of both miscarriage and abortion suggest many similarities in emotional responses to early cessation of pregnancy. Both miscarriage and abortion may involve a sense of loss, leading to grief. This grief may be difficult to resolve if it cannot be shared with others, as may be the case in either miscarriage or abortion. In both cases it appears that the male partner's support is quite essential to the woman's emotional recovery. Isolation may be felt in either case. Guilt emerges after either event in a woman's life as she blames herself for the loss, or the circumstances surrounding the choice of termination. The difference lies in the aspect of control. A woman experiencing a miscarriage lacks any control over the situation. One electing to abort has the option, although circumstances may make her feel she has little choice.

A retrospective comparison of the two groups of women, those with miscarriage (spontaneous abortion) and those terminating by choice (abortion), was undertaken in 1969. Simon, Rothman, Goff, and Stenuria (1969) studied, through interviews and psychological testing (Minnesota Multiphasic Personality

Inventory-MMPI and Loewinger Family Problems Scale), 32 women who had miscarried and compared them to 46 women who had electively aborted. They described less severe psychiatric illness in the spontaneous abortion group. However, it must be noted that one third of the therapeutic abortion group was aborted for psychiatric reasons, therefore biasing the sample.

Furthermore, Meikle, Robinson and Brody (1977) studied the changes in psychological reactions to abortions since legalization. Comparing two groups of 100 women applying for abortion, one group in 1967-68 and the other group in 1975, they found that there was a significant reduction in psychopathology (as measured by the Minnesota Multiphasic Personality Inventory) since legalization of abortion. Therefore, the earlier study by Simon, Rothman, Goff and Senturia may have different results if repeated today.

Possible Effects of Abortion on Miscarriage

Marris (1974), through his studies of bereaved widows, created a theory he terms the "conservative impulse" (p.5). He believes that all our present experiences are influenced by past ones. "We assimilate new experiences by placing them in the context of a familiar, reliable construction of reality" (p. 6). One tends to make sense of loss in light of previous experience with loss. Therefore, based on "conservative impulse" one would hypothesize that the loss experienced by an abortion would affect a later miscarriage, or vice versa. They are similar although have striking differences. The coping and experience of the first may affect the experience of the second.

There appears to be two polar views on the effects of a history of abortion on the experience of miscarriage. One view is that the abortion causes increased negative sequelae during a miscarriage (Reinharz, 1987; Worden, 1982). The other observation is that a previous abortion has very little effect on the feelings surrounding a miscarriage (Swanson-Kauffman, 1983).

Few studies actually link the effects of an abortion to the experience of a miscarriage. To broaden the perspective, first pregnancy in relation to previous losses (both miscarriage and abortion) will be reviewed. Then the literature that directly links an abortion to subsequent losses will be reviewed.

Malmquist, Kaij, and Nilsson (1969) studied post partum psychiatric symptoms with mailed questionnaires to 861 women 3,6,9, and 12 months after delivery. Some of these women (111) were recorded as having had one or more spontaneous abortions (miscarriages) prior to the last pregnancy. There were differences with respect to age, parity, and other variables, so a matched control group was created. A second questionnaire was sent to the women in the matched pairs. 91.9 per cent of the questionnaires were returned, some had to be excluded from the study because they had miscarriages since the first questionnaire, or never had a miscarriage at all. In total 84 complete pairs were available for further study. Post partum mental health was estimated from the answers to questions on 24 psychiatric symptoms. Two symptoms were significantly more common among the miscarriage group, unsteadiness or vertigo and depression. Significantly more women in the miscarriage group admitted nervous symptoms during the year prior to the last pregnancy also.

Therefore, it may be concluded that women with a history of miscarriage have increased psychiatric symptoms. Generalizations may only be made to women who have completed a pregnancy, not those who have just miscarried without a term pregnancy. However, if the history of miscarriage increases psychiatric symptoms, one may extrapolate there is the possibility that the history of abortion may affect the psychiatric wellness with a miscarriage, the focus of this thesis.

Kumar and Robson (1978) analyzed the effects of a previous elective abortion on primiparous women. 119 subjects were interviewed and given questionnaires throughout their pregnancy. 21 of these women had obtained an abortion in the past. Of these 21, eight were clinically depressed. Of the remaining 98 (who had no history of elective abortion), there were also eight who were depressed. They concluded, therefore, that women with a history of abortion may be at increased risk of depression during a subsequent pregnancy ($P < 0.001$).

As in the previous literature that describes the tendency for abnormal grief response (Joy, 1985; Buckles, 1982; Cavenar, Maltbie and Sullivan 1978), Worden (1982) also believes women are at increased risk for abnormal grief reactions with future losses following an abortion. As a grief counsellor he has worked with women who have histories of abortion. He summarizes, "Abortion is one of those unspeakable losses that people would rather forget. The surface experience after an abortion is generally one of relief; however, a woman who does not mourn the loss may experience the grief in some subsequent

who does not mourn the loss may experience the grief in some subsequent loss." (p. 91)

Reinharz (1987) also identified another reaction when a miscarriage follows a previous abortion. One woman in her study blamed her miscarriage on her past decision to abort. "I was convinced that the abortion had been responsible for the miscarriage" (p. 51-2).

It appears, then, that a previous abortion may increase the possibility of negative psychological sequelae with a miscarriage. However, Swanson-Kauffman's (1983) study of the event of miscarriage revealed the opposite. Several women reported a history of past abortion, but felt little additional grief or remorse related to the abortion. Swanson-Kauffman stated:

They all shared one common perception of it (the elective abortion); that is, it was right for that situation in their life when they did it. Yes, it hurt some now, but it truly did not seem to be a major source of anguish. As a group, they admitted how surprisingly different it was to lose a desired pregnancy at a time in their life when they were ready to have a child. (p. 188)

In summary, there are two conflicting views of the psychological consequences of history of elective abortion on a miscarriage. One view says the abortion may cause increased grief, the other view says there is little effect.

CHAPTER 3

METHODOLOGY

The methodology section contains the specifics of the study's structure and implementation: design, sample, instrumentation, human subjects protection, and methods of analysis.

Design

This study involved secondary analysis of data collected for Swanson-Kauffman's study, "Meaning of Miscarriage Scale: Refinement and Establishment of Psychometric Properties" (Swanson-Kauffman, University of Washington, Seattle, in progress). A copy of the MMS is in Appendix A. A comparative analysis of two groups of women identified in the original sample was undertaken. The two groups were those with a history of elective abortion and those without.

The primary hypothesis (stated in the null) tested was: There is no difference in the mean MMS scores between the groups of women with a history of abortion vs. those without a history of abortion ($H_0: \bar{X}_1 = \bar{X}_2$). Secondary hypotheses (stated in the null) tested were: There is no difference in mean age, length of time since loss, number of live children, history of stillbirth or neonatal death, and education, between the two groups (those with a history of abortion and those without a history of abortion).

Sample

Included in the original study were 446 women recruited from across the United States and Canada via health care provider referrals, posters, and

published advertisements. Participants ranged in age from 19 to 46 years and had experienced their miscarriage from 1 month to 10 years prior to participation.

Self report of miscarriage within the last 10 years was the primary inclusion criterion. Miscarriage was defined in the opening statement of the questionnaire as unplanned, unexpected loss of a pregnancy prior to 20 weeks gestation. Women were included whose uterus evacuated the products of conception on their own or with the assistance of a dilation and curettage (D & C).

Descriptive data on the questionnaire included the question: How many of these [obstetrical] experiences have you had? Those indicating a history of elective abortion were used as the abortion group in the comparative analysis. (A separate category included termination of pregnancy because of problems with the baby, such as a known genetic problem. These subjects are not designated as having an elective abortion for this analysis.)

After initial analysis of the tool, 40 more questionnaires were received, bringing the total sample for secondary analysis to 486. The two groups to be compared consisted of 84 cases with a history of elective abortion, and 376 cases who had no history of elective abortion. Therefore, of the 486 total cases 460 had responded to the item concerning abortion and were available for analysis of the MMS score means.

Instrument

The research instrument used in this study is entitled "Meaning of Miscarriage Scale" (MMS) developed by Swanson-Kauffman (study in progress). Items for the questionnaire originated from the Losing and gaining category of the Human Experience of Miscarriage Model (Swanson-Kauffman, 1983). The Miscarriage Model was derived from a phenomenological study of 20 women who had recently miscarried. Items for the MMS were derived from responses of the 20 women to the interview questions: What did you lose?; What did you gain?; and Can you sum it all up in one word or phrase?

The original MMS consisted of 105 items. Item level statistical analyses of ranges and variances and correlation (item to item and item to total) were used to reduce the questionnaire to a 30 item unidimensional measure of the negative meaning women attribute to their miscarriage.

Two different types of item format were used in the questionnaire: Likert-type and Harter (1979,1980) forced- choice. The 4 point Likert questions have a response set from "Definitely true for me" to "definitely not true for me". The Harter forced choice format requires that two choices be made; first the individual decides which of two opposite statements is most like them. Then the decision is "Exactly how much like Me?", scores range from most like me to least like me. In both formats, items are scored such that 1 =most negative meaning for miscarriage and 4 =least negative meaning for miscarriage. Items which are positively worded are reverse scored. Therefore, the 30 item scale

contains a possible range of scores from 30 to 120. Actual scores ranged from 33 to 114, with a mean of 61.

Chronbach's alpha using the original 446 women was 0.93. The next 37 additional cases were analyzed separately, a Chronbach's alpha of 0.94 was obtained for the smaller group, confirming the internal consistency of the tool.

Human Subjects Protection

Due to the anonymous, non-invasive format of the MMS, the original investigator (Swanson-Kauffman, in progress) received exempt approval from the Human Subject's Review Boards in the Department of Parent and Child Nursing and the University of Washington. This review is filed with the University of Washington School of Nursing and was completed prior to any research activities.

Data Analysis

Data were analyzed using descriptive statistics as well as T-tests and correlations as appropriate. T-test analysis of the scores for the abortion group vs. the non-abortion group was the primary focus of the study. The two groups were also compared for differences in age, length of time since loss, number of live children, history of stillbirth or neonatal death, and years of education.

CHAPTER 4

FINDINGS

Characteristics of Sample

A total of 486 cases were available for analysis, all women who had miscarried within the last ten years. Age ranged from 19 to 46 years with 33 years being the mean. The length of time since the miscarriage ranged from 0 months to 10 years, the mean length of time since loss was 31 months. The number of live children each individual had delivered ranged from 0 to 7 with a mean of 1.5. A previous loss due to stillbirth or neonatal death was reported by 55 individuals: 27 women reported one stillbirth, three women reported two stillbirths, 19 women reported one neonatal death, four women reported 2 neonatal deaths and one individual reported six neonatal deaths. Education level for the group ranged from nine to 27 years of school. The mean level of education was 16 years.

Table 1-Variable's Range and Mean for Total Sample.

<u>Variable</u>	<u>Range</u>	<u>Mean</u>
Age	19-46 years	33 years
Length of time since loss	0 months-10 years	31 months
Number of Live children	0-7	1.5
Education	9-27 years	16 years
Scores on MMS	33-114	61

The secondary hypotheses (There is no difference in the means of the demographic variables between the groups of women with a history of abortion vs. those without a history of abortion) were tested by means of T-tests. The groups showed no significant difference in the variables: Age, Length of time since miscarriage, number of children born alive, history of stillbirth or neonatal death, or educational level.

Table 2-Variable Means and Significance of Difference between the Two Groups of Women.

<u>Variable</u>	<u>Mean of Women With History Of Abortion</u>	<u>Mean of Women with No History of Abortion</u>	<u>Significance</u>
Age	33.83	33.14	p=0.23
Length of Time since Loss (in months)	30.44	30.79	p=0.92
Number of Live Children	1.29	1.54	p=0.08
History of Stillbirth or Neonatal Death	0.12	0.15	p=0.65
Education	16.42	15.97	p=0.14

Therefore, all of the secondary hypotheses, as stated in the null, were accepted.

Comparison of Scores

A total of 460 cases were complete for comparison of MMS scores between two groups of women, those with a history of abortion and those without. 84 women reported at least one abortion, 376 reported no history of abortion. The mean MMS score for those with a history of abortion was 71.0417, with a standard deviation of 18.175. Of the 376 reporting no history of abortion the mean score was 67.5160, with a standard deviation of 18.042. A T-test revealed no significant between-group difference ($p = .107$).

Table 3-Comparison of the Two Groups in Number of Cases, Mean Scores, and Standard Deviation.

	<u>Number of Cases</u>	<u>Mean MMS Score</u>	<u>Standard Deviation</u>
Abortion Group	84	71.04	18.18
No Abortion Group	376	67.52	18.04

Level of Significance: $p = 0.107$

Therefore, the primary hypotheses (as stated in the null) was accepted. The sample analyzed did not demonstrate a significant difference in mean scores on the MMS between two groups of women, those with a history of miscarriage and those without.

CHAPTER 5

DISCUSSION

The current study has compared the subjective meaning of miscarriage, as determined by the MMS scale, of two groups of women: those with a history of elective abortion and those without. This chapter will include discussions of the sample and findings, recommendations for future study, and implications for nursing practice.

Discussion of the Sample

Total Sample

The overall sample studied contained participants of varied age, educational level, and length of time since loss. The relatively large sample size *minimizes error due to sample homogeneity*. However, all the participants were volunteers for the study which raises the question of those women who may have known of the study, but chose not to participate. In Adler's (1976) study of "Sample attrition in studies of psychosocial sequelae of abortion: How great the problem?" she concluded that those women for whom an abortion would be more stressful elected not to participate in research. Could the same group of women be absent from the present study? Were those women who carried guilt from a previous abortion less likely to participate in the present study?

Comparison Groups

The comparison groups were compared on five variables. The two groups of women compared in the present study appeared to be similar on the

variables: age, length of time since loss, number of children, history of stillbirth or neonatal death, and educational level. Thus no spurious associations for the listed variables were found.

Findings

The two groups showed no significant difference in their mean MMS scores. The results indicated that women with a history of abortion are similar to women with no history of abortion in their subjective interpretation of the negative impact of miscarriage as measured by the MMS.

Speculation as to the reasons for the lack of difference will be explored. First of all, one must consider that the women who had severe psychological sequelae to their abortion, and may be more severely affected with the experience of miscarriage, may not have volunteered for the study. If women who felt devastated by the abortion experience had not participated we would expect the standard deviation for the abortion group to be smaller than for the non-abortion group. As seen in Table 3, the Standard Deviations were similar. Therefore, attrition of women with a history of abortion for whom the experience was more devastating was unlikely.

A second, more likely, reason is that a history of abortion does not affect the negative meaning of miscarriage for women. The two events are not interrelated. This idea is derived from Swanson-Kauffman's (1983) interviews with four women in her miscarriage study who also had a history of abortion. Women who had a history of abortion did not associate it with a miscarriage. The two events were viewed as distinct and separate. The informants

interviewed by Swanson-Kauffman shared the perception that the abortion was right for the situation in their life when they did it. A miscarriage was different in that it was a desired pregnancy at a time in their life when they were ready to have a child. Thus, several factors are identified as differences between abortion and miscarriage which prevent application of Marris's (1974) model of "conservative impulse", where the experience of one event later affects a similar one.

The differences seen in the two events are related to the life situation for each. In an abortion the present pregnancy is not desired, the contrary may be assumed for most miscarriages. In an abortion a woman chooses to terminate the pregnancy, in miscarriage the loss is not the woman's choice. Although the choice is forced and often difficult in the instance of an abortion, it may be the best choice a woman makes for the situation she is in. Possibly it is the lack of choice and loss of control over one's life that is a major factor in the negative meaning attributed to miscarriage.

Abortion may be viewed as a loss (Freeman, 1978; Peppers, 1987-88), but the loss is not then associated with a loss one does not choose, as experienced with a miscarriage. In Pepper's (1987-88) study "Grief and elective abortion: Breaking the emotional bond", he speculated that, given the rapid resolution of symptoms of grief, the decision to terminate may initiate the grief reaction. Therefore, the grief is closely associated with choice in abortion, an element absent in miscarriage.

Another possible answer for the lack of difference on the mean scores of the two groups is the possibility the MMS does not measure negative feelings unique to the subgroup of women who have aborted. This is unlikely, however, since the scale was derived from interviews which included women with such a history.

Limitations of Study

The original investigator did not plan to compare the two groups of women used for this project. The questionnaire soliciting the information was worded: "How many of these experiences have you had? Elective abortion...._____." Therefore, the sequencing of events was not clarified. Questions of which event was experienced first go unanswered in the present study.

A limitation of the study inherent in the samples chosen prevents the study of a select group of women for whom I question if miscarriage may be more difficult. Women who experience a miscarriage after abortion but have not experienced any live births may experience more difficulty in the situation. Is this subgroup more likely to associate negative meaning with the miscarriage? Do they experience more guilt? Would an appropriate control group be primigravidas who experienced miscarriage?

Implications for Future Research

The many unanswered questions point to qualitative research to identify the direction one should pursue in the relationship of abortion and miscarriage. First of all, grounded theory could identify the feelings associated with abortion

for most women. Thus, by deriving the information directly from the ideas presented by women, appropriate themes could be recognized.

Meticulous attention to the demographics and sequencing of obstetrical events may provide insight into associations previously overlooked. Given today's volatile political climate, specific information about the atmosphere in which the abortion was performed may be important (ie. was the abortion legal when performed?). With this expanded knowledge the association between miscarriage and elective abortion may be pursued.

Qualitative research attentive to women with a history of abortion and miscarriage should pursue questions such as: Do the two events impact each other? Does the sequence of events affect the woman's perception? Is the concept of choice, and thus control, a predominant theme? What type of emotional support do women want from health care providers and others aware of their personal history?

With continued administration of the MMS, more data will be gathered for analysis. Improved demographic data, such as sequencing of obstetrical events, will allow analysis of relationships more clearly. Specific item analysis which compare women with a history of abortion to those without, especially for those items identified as pertinent to women with a history of abortion, may indicate a relationship between previous abortion and specific feelings associated with a later miscarriage.

A study which examines the question of nulliparas experience of miscarriage could be undertaken with either examination of qualitative research

or quantitative data using the MMS. This information would be useful to health care providers counseling this specific subgroup. Such studies could answer numerous questions: Does miscarriage have more negative psychological sequelae if one has never delivered a live child? Is this compounded by the history of an abortion?

Implications for Nursing

Many nurses, in the role of clinic nurse, nurse practitioner or midwife, may be in the position to counsel patients experiencing a miscarriage. Although it is known that a miscarriage is a period of grief, when the obstetrical history reveals an abortion in the woman's past, how a nurse should respond is confusing.

It may relieve many nurses to know that the two events do not appear to compound grief and make the miscarriage more devastating for a woman. With this knowledge nurses may be less reluctant to address the issue of a past abortion. Improved knowledge surrounding patients experiencing miscarriage, with varied obstetrical histories, will increase nurses awareness of possible emotions surrounding the event. Although one must never presume that an individual patient precisely conforms to the results of a research study, the overall knowledge may make nurses cognizant of differences between miscarriage and abortion.

In addition, addressing this controversial issue of abortion brings it out into the open. With increased knowledge and awareness surrounding the issue,

nurses may feel comfortable exploring the feelings possible to patients with abortion in their history.

It is my strong desire that this study may open the eyes and hearts of nurses so that women do not feel compelled to hide their pasts. Abortion need not be avoided in counseling, thus the "deep dark secret" need not be so.

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APPENDIX A--Meaning of Miscarriage Scale (MMS)

Section 1 -- Directions: The following statements have been made by women who have miscarried. Please read the statement and decide how true the statement is for you. If it is exactly the way you feel, circle "1" under DEFINITELY TRUE FOR ME. If it is close to the way you feel, circle "2" under QUITE TRUE FOR ME. If it is just slightly true for you, circle "3" under BARELY TRUE FOR ME. If it is just not true at all for you, circle "4" under DEFINITELY NOT TRUE FOR ME.

FOR EXAMPLE: Mary tried for ten months to have her baby. She miscarried at eight weeks. She was heartbroken about her miscarriage. Therefore, she circled "4" under DEFINITELY NOT TRUE FOR ME in response to the following statement.

	Definitely True for Me	Quite True for Me	Barely True for Me	Definitely <u>Not</u> True for Me
I was relieved that my pregnancy ended on its own.	1	2	3	4

	Definitely True for Me	Quite True for Me	Barely True for Me	Definitely <u>Not</u> True for Me
1. My miscarriage was a horrendous, devastating experience.	1	2	3	4
2. I felt very much alone in my miscarriage.	1	2	3	4
3. After my miscarriage, I was feeling down for several days, but then I got over it.	1	2	3	4
4. Miscarriage equals one big loss of control.	1	2	3	4
5. I believe miscarriage was a way to keep me from having an unhealthy baby.	1	2	3	4
6. My miscarriage destroyed my zest for life.	1	2	3	4
7. I have gotten through dealing with my miscarriage.	1	2	3	4
8. I feel my body has betrayed me.	1	2	3	4
9. Miscarriage is like going from one extreme of happiness to the other, total unhappiness.	1	2	3	4
10. My chances of miscarrying again are quite high.	1	2	3	4
11. Miscarriage is like a nightmare.	1	2	3	4
12. Miscarriage equals a loss of hope.	1	2	3	4
13. When I think of my miscarriage, I still feel emotional pain.	1	2	3	4
14. I believe that miscarriage is nature's way of correcting a mistake.	1	2	3	4
15. My miscarriage represents a major setback for me.	1	2	3	4
16. I have nightmares about my miscarriage.	1	2	3	4
17. Miscarriage equals a loss of a part of my partner and me	1	2	3	4

Section 2 -- Directions: The next two parts of this questionnaire requires that you make TWO DECISIONS with each question. FIRST, you must decide whether the statement on the left or the statement on the right hand side of the page is most like the way you feel. SECOND, look directly below the statement you choose. Ask yourself "Is the statement really like me?" or "Is it sort of like me?" Put a CIRCLE around "Sort of like me" if the statement you choose is kind of true for you. OR put a CIRCLE around "Really like me" if the statement you choose is really true for you.

FOR EXAMPLE: After Mary and Bob waited for five years, they decided to have their first child. Mary watched her menstrual cycles closely to see when she ovulated. Ten months after deciding to get pregnant, they did conceive. Mary would answer the sample question in this way:

SAMPLE QUESTION:

Some women plan their pregnancy.

BUT

Some women do not plan their pregnancy.

Sort of
like me

Really
like me

Sort of
like me

Really
like me

FIRST, Mary decided the statement on the left was most like her. SECOND, she circled "Really like me" because that was really true for her.

PLEASE RESPOND TO THESE STATEMENTS AS YOU NOW FEEL ABOUT YOUR MOST RECENT MISCARRIAGE.

18. Some women who miscarry do not feel they have lost a part of themselves.

BUT

Some women who miscarry feel they have lost a part of themselves.

Sort of
like me

Really
like me

Sort of
like me

Really
like me

19. Some women who miscarry feel there will always be a place in their heart for that baby.

BUT

Some women who miscarry do not feel there will always be a place in their heart for that baby.

Sort of
like me

Really
like me

Sort of
like me

Really
like me

20. For some women miscarriage equals a lost chance to be a mother.

BUT

For some women miscarriage does not equal a lost chance to be a mother.

Sort of
like me

Really
like me

Sort of
like me

Really
like me

21. Some women who miscarry feel they have lost a person.

BUT

Some women who miscarry do not feel they have lost a person.

Sort of
like me

Really
like me

Sort of
like me

Really
like me

22. Some women who miscarry experience a loss of pride in themselves.

BUT

Some women who miscarry do not experience a loss of pride in themselves.

Sort of
like me

Really
like me

Sort of
like me

Really
like me

- | | | | |
|-----|---|-----|---|
| 23. | Some women fear that miscarriage will happen to them again. | BUT | Some women do not fear that miscarriage will happen to them again. |
| | Sort of
like me | | Really
like me |
| 24. | Some women who have miscarried are irritated when their baby is called a fetus. | BUT | Some women who have miscarried are not irritated when their baby is called a fetus. |
| | Sort of
like me | | Really
like me |
| 25. | Some women dwell on the fact that their child will only exist in their memory. | BUT | Some women do not dwell on the fact that their child will only exist in their memory. |
| | Sort of
like me | | Really
like me |
| 26. | Some women who miscarry wonder "why did it happen to me." | BUT | Some women who miscarry do not wonder "why did it happen to me." |
| | Sort of
like me | | Really
like me |
| 27. | Some women would describe their miscarriage as just a loss of pregnancy. | BUT | Some women would not describe their miscarriage as just a loss of pregnancy. |
| | Sort of
like me | | Really
like me |
| 28. | Some women feel guilt about their miscarriage. | BUT | Some women do not feel guilt about their miscarriage. |
| | Sort of
like me | | Really
like me |
| 29. | Some women don't care about not getting to wear maternity clothes. | BUT | Some women do care about not getting to wear maternity clothes. |
| | Sort of
like me | | Really
like me |
| 30. | Some women who miscarry feel very isolated by their experience. | BUT | Some women who miscarry are amazed at the number of people who shared in their loss. |
| | Sort of
like me | | Really
like me |